WHAT IS CLAIMED IS:

1.   A printing control method of holding printing data in a hierarchical structure and issuing a printing job to a printer to cause the printer to print,
5   comprising:

    a setting step capable of setting different setting values in a lower layer and an upper layer of the hierarchical structure as printing setting data containing double-sided printing or single-sided
10   printing setting; and

    an instruction step of, when a setting value different from a setting value of the upper layer is set in the lower layer of the hierarchical structure, instructing the printer on a setting in the lower layer
15   for each printing data to which the setting value is applied.

2.   The method according to claim 1, wherein the setting step includes a determination step of determining whether the printer copes with a change in
20   the printing setting data during a printing job, and when the printer is determined to cope with the change, different setting values can be set in the lower layer and the upper layer of the hierarchical structure.

3.   The method according to claim 1, wherein the
25   method further comprises a printer setting step of setting a printer for use, and in the printer setting step, whether a newly set printer copes with a change

in the printing setting data during a printing job is determined, and when the printer is determined not to cope with the change and different setting values are set in the lower layer and the upper layer, setting is

5   so changed as to make the setting value of the lower layer coincide with the setting value of the upper layer.

4.   The method according to claim 3, wherein in the printer setting step, when the newly set printer is

10   determined not to cope with the change in the printing setting data during the printing job and different setting values are set in the lower layer and the upper layer, a warning to change setting is generated to a user before setting is so changed as to make the

15   setting value of the lower layer coincide with the setting value of the upper layer.

5.   The method according to claim 1, wherein a setting in the upper layer includes a setting of a whole document, and a setting in the lower layer

20   includes a setting of a chapter obtained by dividing the document.

6.   A document processing method of processing original data having a printing format as an attribute, comprising:

25   a step of giving an attribute to each node and holding the original data in a tree structure; and

a step of setting, as an attribute of the entire

original data, an attribute representing whether to print on only one side or two sides of a paper sheet, setting, as an attribute of each node, an attribute representing printing on only one side or the two sides

5   of the paper sheet, allowing independently setting the attributes, and switching a printing method in accordance with the attribute.

7.   The method according to claim 6, wherein when an output apparatus cannot switch the printing method

10   during printing, setting of the attribute at each node is inhibited.

8.   A printing control apparatus which holds printing data in a hierarchical structure and issues a printing job to a printer to cause the printer to print,

15   comprising:

setting means capable of setting different setting values in a lower layer and an upper layer of the hierarchical structure as printing setting data containing double-sided printing or single-sided

20   printing setting; and

instruction means for, when a setting value different from a setting value of the upper layer is set in the lower layer of the hierarchical structure, instructing the printer on a setting in the lower layer

25   for each printing data to which the setting value is applied.

9.   The apparatus according to claim 8, wherein said

setting means includes determination means for
determining whether the printer copes with a change in
the printing setting data during a printing job, and
when the printer is determined to cope with the change,

5   different setting values can be set in the lower layer
and the upper layer of the hierarchical structure.

10.   The apparatus according to claim 8, wherein the
apparatus further comprises printer setting means for
setting a printer for use, and said printer setting

10   means determines whether a newly set printer copes with
a change in the printing setting data during a printing
job, and when the printer is determined not to cope
with the change and different setting values are set in
the lower layer and the upper layer, changes setting so

15   as to make the setting value of the lower layer
coincide with the setting value of the upper layer.

11.   The apparatus according to claim 10, wherein when
the newly set printer is determined not to cope with
the change in the printing setting data during the

20   printing job and different setting values are set in
the lower layer and the upper layer, said printer
setting means generates a warning to change setting to
a user before changing setting so as to make the
setting value of the lower layer coincide with the

25   setting value of the upper layer.

12.   The apparatus according to claim 8, wherein a
setting in the upper layer includes a setting of a

whole document, and a setting in the lower layer includes a setting of a chapter obtained by dividing the document.

13.   A document processing apparatus which processes

5   original data having a printing format as an attribute, wherein

an attribute is given to each node to hold the original data in a tree structure, and

an attribute representing whether to print on

10   only one side or two sides of a paper sheet is set as an attribute of the entire original data, an attribute representing printing on only one side or the two sides of the paper sheet is set as an attribute of each node, the attributes can be independently set, and a printing

15   apparatus is switched in accordance with the attribute.

14.   The apparatus according to claim 13, wherein when an output apparatus cannot switch the printing method during printing, setting of the attribute at each node is inhibited.

20   15.   A computer program product which holds a program for causing a computer to hold printing data in a hierarchical structure and issue a printing job to a printer to cause the printer to print, wherein the program has

25   a code for a setting step capable of setting different setting values in a lower layer and an upper layer of the hierarchical structure as printing setting

data containing double-sided printing or single-sided

printing setting, and

a code for an instruction step of, when a setting

value different from a setting value of the upper layer

5   is set in the lower layer of the hierarchical

structure, instructing the printer on a setting in the

lower layer for each printing data to which the setting

value is applied.

16.   The product according to claim 15, wherein the

10   code for the setting step includes a code for a

determination step of determining whether the printer

copes with a change in the printing setting data during

a printing job, and when the printer is determined to

cope with the change, different setting values can be

15   set in the lower layer and the upper layer of the

hierarchical structure.

17.   The product according to claim 15, wherein the

program further has a code for a printer setting step

of setting a printer for use, and in the code for the

20   printer setting step, whether a newly set printer copes

with a change in the printing setting data during a

printing job is determined, and when the printer is

determined not to cope with the change and different

setting values are set in the lower layer and the upper

25   layer, setting is so changed as to make the setting

value of the lower layer coincide with the setting

value of the upper layer.

18.   The product according to claim 17, wherein in the code for the printer setting step, when the newly set printer is determined not to cope with the change in the printing setting data during the printing job and

5   different setting values are set in the lower layer and the upper layer, a warning to change setting is generated to a user before setting is so changed as to make the setting value of the lower layer coincide with the setting value of the upper layer.

10   19.   The product according to claim 15, wherein a setting in the upper layer includes a setting of a whole document, and a setting in the lower layer includes a setting of a chapter obtained by dividing the document.

15   20.   A computer program product which holds a program for processing original data having a printing format as an attribute, wherein the program has

       a code for a step of giving an attribute to each node and holding the original data in a tree structure,

20   and

       a code for a step of setting, as an attribute of the entire original data, an attribute representing whether to print on only one side or two sides of a paper sheet, setting, as an attribute of each node, an

25   attribute representing printing on only one side or the two sides of the paper sheet, allowing independently setting the attributes, and switching a printing

apparatus in accordance with the attribute.

21.   The product according to claim 20, wherein when an output apparatus cannot switch a printing method during printing, setting of the attribute at each node 5 is inhibited.